

ACCESSION #: 9606200386

LICENSEE EVENT REPORT (LER)

FACILITY NAME: Oyster Creek Unit 1 PAGE: 1 OF 4

DOCKET NUMBER: 05000219

TITLE: Reactor Scram on Low Water Level Due To Personnel Error

EVENT DATE: 04/30/96 LER #: 96-05-00 REPORT DATE: 06/11/96

OTHER FACILITIES INVOLVED: DOCKET NO: 05000

OPERATING MODE: N POWER LEVEL: 100

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR SECTION:

50.73(a)(2)(iv)

LICENSEE CONTACT FOR THIS LER:

NAME: Thomas S. Corcoran TELEPHONE: (609) 971-4986

COMPONENT FAILURE DESCRIPTION:

CAUSE: SYSTEM: COMPONENT: MANUFACTURER:

REPORTABLE NPRDS:

SUPPLEMENTAL REPORT EXPECTED: NO

ABSTRACT:

On April 30, 1996, with a reactor startup in progress, a reactor scram occurred at 0256 hours. When reactor level decreased to 139 inches above Top of Active Fuel (TAF), a Low Level reactor scram occurred as designed. Following the scram, water level further decreased to approximately 120 inches TAF before being restored to normal. The cause of the event was a failure on the part of the operator to properly control reactor water level, aggressively take action to restore level, and use the most conservative reactor water level indicator. A contributory cause was ineffective supervisory oversight in that two SRO licensed supervisors did not take positive action to halt startup activities until normal level control could be reestablished.

The safety significance of this event was minimal. Adequate core cooling was

maintained.

Immediate corrective action was taken to recover water level and place the reactor in a shutdown condition. A discussion of the event was issued to the operators. Guidance was issued to the operators on reactor water level control, and use of the most conservative level indicator during a reactor startup.

Additional long term corrective action will be taken to evaluate the transition point for feedwater control during a reactor start up.

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#### DATE OF OCCURRENCE

The event occurred on April 30, 1996, at 0256 hours.

#### IDENTIFICATION OF OCCURRENCE

An automatic reactor scram was received during a reactor startup due to a low reactor water level signal from the reactor protection system (EIIIS Code: JC). Water level reached the low level setpoint of 139 inches TAF and initiated an automatic reactor scram as designed. This event is reportable under 10 CFR 50.73 )(a)(2)(iv).

#### CONDITIONS PRIOR TO THE OCCURRENCE

The reactor was in the STARTUP mode at 193 Megawatts thermal (approximately 10% of full power) operating at a reactor pressure of 980 psig.

#### DESCRIPTION OF OCCURRENCE

On April 30, 1996, during the midnight shift, a reactor startup was in progress. The reactor was critical in the STARTUP mode at approximately 5% reactor power. Power ascension was continuing.

During the power ascension, reactor water level was in manual control

with the 'C' low flow feedwater regulating valve (EIS Component: LFRV) in service. As reactor power was increased, the turbine bypass valves (EIS Component: BPV) automatically opened to maintain reactor pressure. Feedwater flow was increased by opening the low flow feed regulating valve. In accordance with station procedure, when feedwater flow reached approximately 600,000 lbm/hr the operator controlling reactor water level opened the 'C' main feedwater regulating valve (EIS Component: MFRV) block valve.

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#### DESCRIPTION OF OCCURRENCE (Cont.)

The operator then began preparations to place the 'C' main feedwater regulating valve in service. The transfer from the low flow feedwater regulating valve to the main feedwater regulating valve occurred at approximately 750,000 lbm/hr. As the operator prepared for this evolution, a third turbine bypass valve opened in response to reactor power and pressure. At this point, reactor water level began to decrease. In response to the level transient, the operator commenced opening the 'C' main feedwater regulating valve and monitored system parameters (e.g. feedwater flow, valve position) for expected response. The increase in the rate of feedwater flow was insufficient to turn the decreasing reactor water level. The reactor subsequently scrammed on reactor low water level at approximately 139 inches TAF. Following the scram, reactor water level decreased to approximately 120 inches TAF, as

expected. Level control was recovered, and level was returned to the normal band. A plant cooldown was commenced in accordance with plant procedures.

#### APPARENT CAUSE OF OCCURRENCE

The root cause of this event was determined to be personnel error in that the licensed control room operator did not adequately control reactor water level. The operator allowed reactor water level to drift low out of the normal operating band (155" - 165" TAF) and then did not take aggressive action to restore level back to the operating band.

Additionally, the operator was not monitoring the most conservative (lowest reading) reactor water level indicator.

A contributing cause was ineffective supervisory oversight. There were two SRO licensed C supervisors present in the control room. Even though both supervisors were aware the operator was having some difficulty in maintaining reactor water level, neither supervisor took positive action to halt the startup until normal level control could be re-established.

#### ANALYSIS OF OCCURRENCE AND SAFETY ASSESSMENT

This safety significance of this event is considered minimal. The Technical Specification Safety Limit for reactor water level is 56 inches above the top of the active fuel. The minimum level which was reached during this occurrence was 120 inches above the top of the active fuel.

Therefore, the minimum level which was reached during this occurrence was far in excess of that necessary to maintain adequate core cooling.

Additionally, all reactor protection systems functioned as designed in response to the transient.

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#### CORRECTIVE ACTIONS

The following corrective actions were completed prior to plant restart:

1. A discussion of the event was issued to the operators.
2. Interim guidance was issued to the operators on reactor water level control and use of the most conservative water level indicator during a plant startup.
3. The crew and individual operator performance was evaluated by Operations Management and appropriate actions were taken with the individuals involved. Additionally, Operations Management reviewed the event with the supervisors involved and stressed the importance of maintaining control of the plant during transients.

Additionally, the transition point for switching from low flow feedwater valve control to main feedwater valve control will be evaluated for possible change. This action will be completed by August 1, 1996.

#### SIMILAR EVENTS

None.

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GPU Nuclear

GPU Nuclear Corporation

Post Office Box 388

Route 9 South

Forked River, New Jersey 08731-0388

609 971-4000

Writer's Direct Dial Number:

June 11, 1996

6730-96-2188

U. S. Nuclear Regulatory Commission

Attn.: Document Control Desk

Washington, DC 20555

Dear Sir:

Subject: Oyster Creek Nuclear Generating Station

Docket No. 50-219

Licensee Event Report 96-005

Enclosed is Licensee Event Report 96-005. This event did not impact the health and safety of the public. Please note that the original due date for this LER was May 30, 1996. On that date, an extension to June 13, 1996, was requested by GPUN and granted by the NRC Region I staff. If any additional information or assistance is required, please contact Mr. John Rogers of my staff at 609.971.4893.

Michael B. Roche

Vice President and Director

Oyster Creek

MBR/JJR

Enclosure

cc: Oyster Creek NRC Project Manager

Administrator, Region I

Senior Resident Inspector

GPU Nuclear Corporation is a subsidiary of

General Public Utilities Corporation

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